

WOODROW WILSON BRIDGE REPLACEMENT
REVISED DESIGN PLANS FOR THE URBAN DECK
AT WASHINGTON STREET (GEORGE WASHINGTON MEMORIAL PARKWAY)
City of Alexandria, Virginia

Report to the Federal Highway Administration and the National Park Service

November 1, 2001

Abstract

The Federal Highway Administration (FHWA) has requested that the Commission review revised preliminary and final design plans for one element of the Woodrow Wilson Bridge Replacement Project related to mitigation of the approved bridge design. This feature is the urban deck overpass at Washington Street in Alexandria, Virginia. Highway officials began constructing the foundations for the new bridge in the fall of 2000 and pier construction will begin in late 2001. The submitted revised design plans convey a design effort providing a unified appearance for this western element of the Virginia portion of the river crossing. The FHWA will continue to work with all stakeholders, including the Commission, to refine elements of the preliminary and final design plans for the Jones Point Park and Maryland Potomac River Waterfront Community Park as those sections of the Woodrow Wilson Replacement Bridge project move toward finalization.

Authority

Pursuant to Section 5 of the National Capital Planning Act of 1952, as amended (40 USC 71d).

Commission Action

The Commission:

- **Recognizes** the FHWA's inclusive efforts in developing the final design plans for the urban deck at Washington Street as part of the Wilson Bridge Replacement, and encourages FHWA to continue this level of thoroughness in the development of both Jones Point Park and the Maryland portion of the Bridge Project as it is coordinated with, and submitted to, this Commission.

- **Approves** the revised preliminary and final site and building plans for the urban deck overpass at Washington Street in Alexandria, Virginia, as shown on NCPC Map File No. 2501.00(48.20)-40956.
- **Requests** that the FHWA, in the preparation of subsequent plan submissions for the Woodrow Wilson Bridge Replacement project involving the Potomac River Waterfront Community Park, ensure a high standard of design for the lighting, buildings, and signage planned for that area.

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BACKGROUND AND STAFF EVALUATION

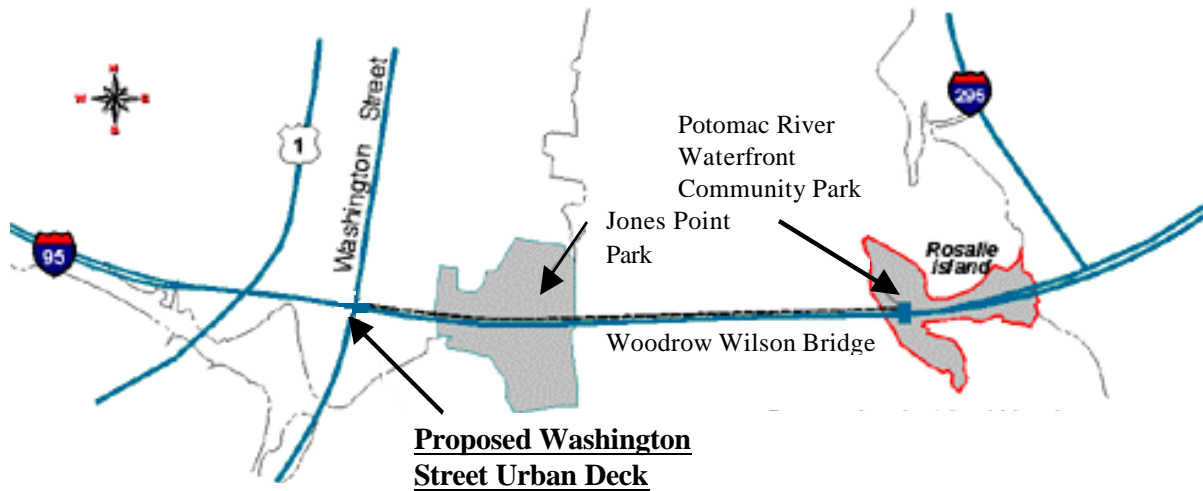
DESCRIPTION OF PROPOSAL

FHWA has submitted revised preliminary and final design plans for an urban deck overpass that relates to the Woodrow Wilson Memorial Bridge (Wilson Bridge) Replacement. The Wilson Bridge carries Interstate 95/Interstate 495, the Capital Beltway, across the Potomac River. The bridge replacement and related highway improvements extend from Telegraph Road, in Virginia on the west, to Maryland Route 210 (Indian Head Highway) on the east. The new bridge as designed will be 6,075 feet long and consist of twin parallel structures of 124 and 110 feet in width.

The existing six-lane bridge was opened to traffic in 1964 to accommodate approximately 75,000 vehicles per day. Today, over 190,000 vehicles use the span daily and the bridge is slated for significant upgrading by way of construction of the new bridge structure approved by the Commission in August of this year.

Phase 1 of the project is complete, and Phase 2 construction will soon be underway. FHWA has scheduled and funded construction in stages over several years. They are:

1. Start of the construction access, dredging, and foundations in the Potomac River—by fall, 2000. This work stage is approaching completion. Concrete piles for landside foundations in Alexandria's Jones Point Park, which began July 2, are now more than 80 percent finished and on track for completion by the end of the year.
2. Begin the construction of the Woodrow Wilson Bridge (outer loop) superstructure—by 2001-2002.
3. Begin the I-295, US 1, and MD 210 interchanges—by 2001-2002.
4. Begin the Telegraph Road interchange—by 2002-2003.
5. Complete the Woodrow Wilson Bridge outer loop—by 2004-2005.
6. Demolish the existing Woodrow Wilson Bridge and complete inner loop—by 2006-2007.
7. Complete all interchanges—by 2006-2007.



LOCATION OF URBAN DECK, JONES POINT PARK, AND POTOMAC RIVER WATERFRONT COMMUNITY PARK

FHWA's current submission includes revised preliminary and final design plans for development of an urban deck overpass at Washington Street in Alexandria, Virginia. The plans have been developed to a final level of design and construction documentation, and will provide the basis to issue an invitation for bid by the Commonwealth of Virginia and FHWA. Accomplishing this milestone allows the construction contract award to proceed on schedule.

The revised urban deck plans are part of a mitigation effort agreed to in the Memorandum of Agreement (MOA) and the FHWA NEPA Record of Decision for the Woodrow Wilson Bridge. The urban deck includes 2.25 acres encompassing the overpass for Washington Street (the George Washington Memorial Parkway) above Interstate Route 95. Also included in the design of the overpass are:

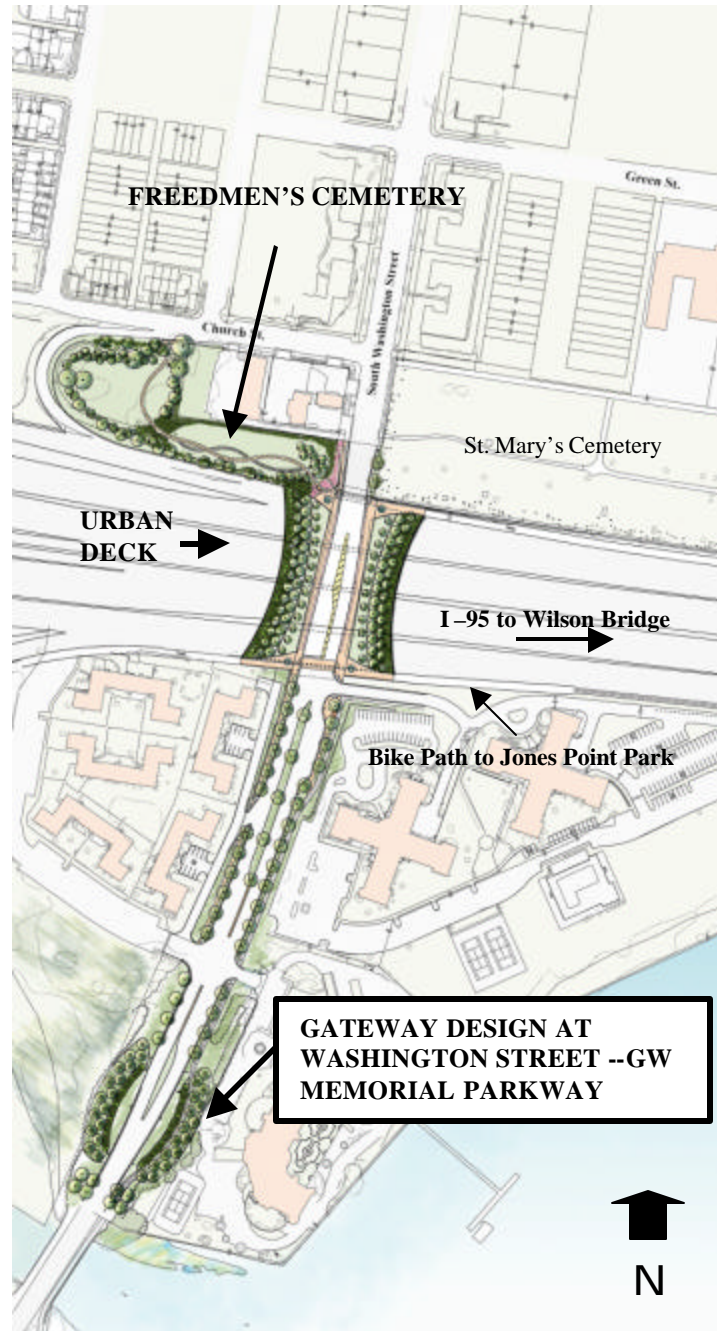
- Bike path connections to the Mount Vernon Trail, Jones Point Park, and the U.S. Route 1 bike path.
- A bike and walkway connection to Freedmen's Cemetery and Church Street northwest of the overpass.
- Reconstruction of Washington Street to include four vehicle travel lanes (two north and two south) with a median of varying width.

- Nine- and twelve-foot-wide pedestrian sidewalks on the west and east sides of the overpass, respectively.
- Extension of the Washington Street streetscape (landscape design) to approximately the Mount Vernon Parkway bridge over Hunting Creek, involving additional tree, shrub, and groundcover planting along with re-alignment of the Mount Vernon Trail near the Porto Vecchio residential development.
- Final design of the Freedmen's Cemetery and associated community open space.

PREVIOUS COMMISSION ACTION

At its March 1, 2001 meeting, the Commission:

- Commended the FHWA for the high quality of the preliminary design featured in the plans for the urban deck at Washington Street, Jones Point Park, and the Potomac River Waterfront Community Park as part of the Wilson Bridge Replacement. The Commission encouraged FHWA to ensure that the harmonious designs it has developed are carried through to their completion.



URBAN DECK SITE PLAN

- Approved the preliminary site and building plans for the urban deck overpass at Washington Street and improvements to Jones Point Park in Alexandria, Virginia, and development of the new Potomac River Waterfront Community Park at Rosalie Island in Prince George's County, Maryland, as shown on NCPC Map File No. 2501.00(38.00)-40893. Excepted from the approval were the gateway sentinel elements at Potomac River Waterfront Community Park, and the restroom/maintenance buildings at Jones Point Park and Potomac River Waterfront Community Park, which were approved in concept only.
- Requested that, in the preparation of subsequent plan submissions for the Woodrow Wilson Bridge Replacement project, the FHWA:
 - Provide, as the Commission earlier requested, complete details on the Wilson Bridge project noise barriers as they relate to the three amenity areas.
 - Present more design information on the visual graphics and signage that is to be utilized at both the urban deck and Potomac River Community Park as a "gateway announcement" at each end of the Wilson Bridge.
 - In the development of the three amenity areas (the urban deck, Jones Point Park, and Potomac River Waterfront Community Park), ensure a high standard of design for light fixtures and signage.

In August 2001 the Commission commended the FHWA for the high quality of the final bridge design and approved the final building plans for the Woodrow Wilson Bridge Replacement, as shown on NCPC Map File No. 3206.00(48.20)-40932.

Additionally, the Commission requested that, in the preparation of subsequent plan submissions for ancillary elements of the Woodrow Wilson Bridge Replacement project, the FHWA:

- Present design information on the visual graphics and signage that is to be utilized at both the urban deck and Potomac River Community Park as a "gateway announcement" at each end of the Wilson Bridge.
- In the development of the three project amenity areas (the urban deck, Jones Point Park, and Potomac River Waterfront Community Park), ensure a high standard of design for all light fixtures, structures, and signage.

CONSULTATION

All of the submitted revised preliminary and final design work has been coordinated by FHWA and its consultants with local government jurisdictions, public interest groups, and state agencies. The FHWA continues its coordination efforts with the Virginia Department of Transportation and the National Park Service. Approvals from the Alexandria City Council, in December 2000, had been secured for the final urban deck development. In mid-2001, the FHWA had conducted

and completed reviews on the restroom building at Jones Point Park and the urban deck at Washington Street with the City of Alexandria officials.

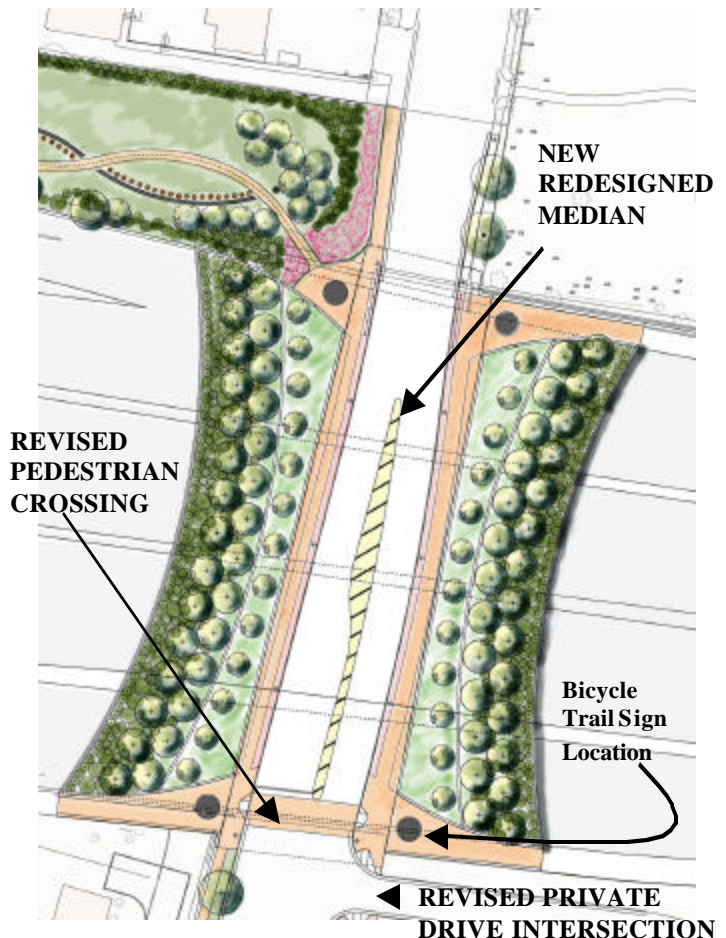
In early September through October 2001, FHWA met with NCPC staff to review the Commission's request for information on the final design plans for the urban deck wall surfaces and the traffic noise barriers that were to occur in the area. At that time, various discussions also transpired about potential railing materials, paved surfaces, signage configurations, and design characteristics that would be finalized.

Although the original submission included aspects of Jones Point Park, further review by staff had determined, upon consultation with FHWA, that the park portion of the submittal would be withdrawn for further refinement and coordination.

EVALUATION

The staff recommends that the Commission approve the revised preliminary and final site and building plans for the urban deck overpass at Washington Street in Alexandria, Virginia.

The progress made in the design of the this ancillary component of the Wilson Bridge project, since the Commission's March 2001 review, is encouraging. The detailed design plans successfully meet the public and local jurisdictional concerns involving proportions, location and the impacts to the Parkway environs. Moreover, the desire to improve the availability and access of additional amenities for public enjoyment, in conjunction with the more pragmatic requirements of road improvement, has resulted in an acceptable streetscape and open space amenity that is appropriate. FHWA's concern for developing a harmonious design that integrates physical details of the parkway elements into the overall deck design is apparent. The coordination of the urban deck design is fully reflected in the final location of all traffic noise barriers situated along the I-95 urban deck corridor, and also in how the deck relates to the corridor and features of George Washington Memorial Parkway. As indicated in the final plans, the deck exhibits no signage above the mainline travel lanes of I-95.



DETAIL VIEW OF URBAN DECK

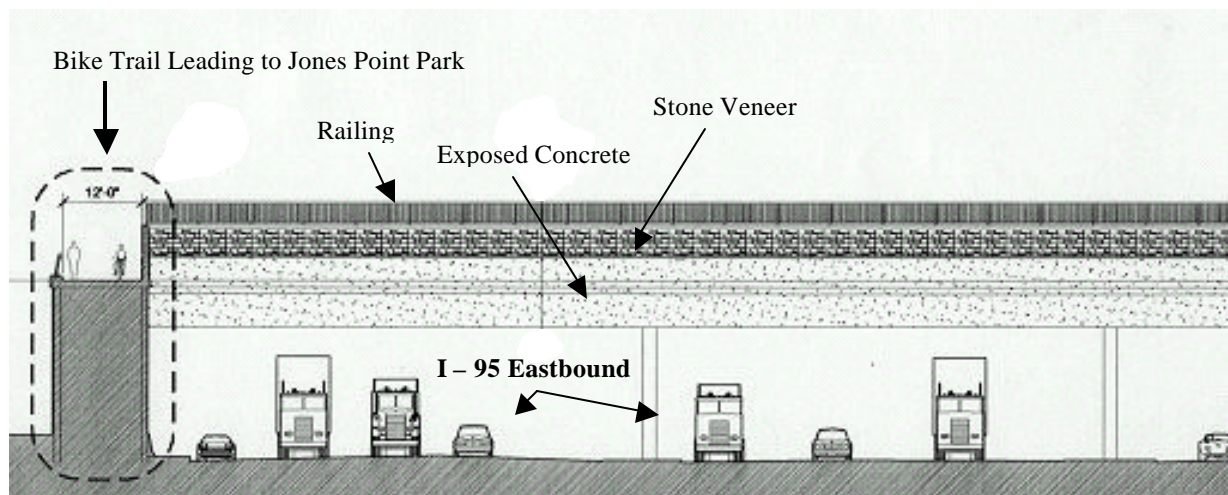
We acknowledge FHWA's efforts in this Virginia portion of the project, but remind FHWA to continue the effort of coordination and high quality design in the final development of Jones Point Park and the Maryland Potomac River Waterfront Community Park design plans. This includes such things as ensuring that construction materials are of the highest value and that architectural detailing and refinements contribute to the overall project design character.

Staff believes the final design of the urban deck has addressed all issues the Commission raised about visual graphics and signage that is to be utilized at this area of the bridge project. Moreover, the design has maintained a prominent level of physical organization and design sensitivity to the deck's detailing, location, and materials, that without the careful attention demonstrated, would have undoubtedly degraded an important community amenity associated with this significant regional transportation project.

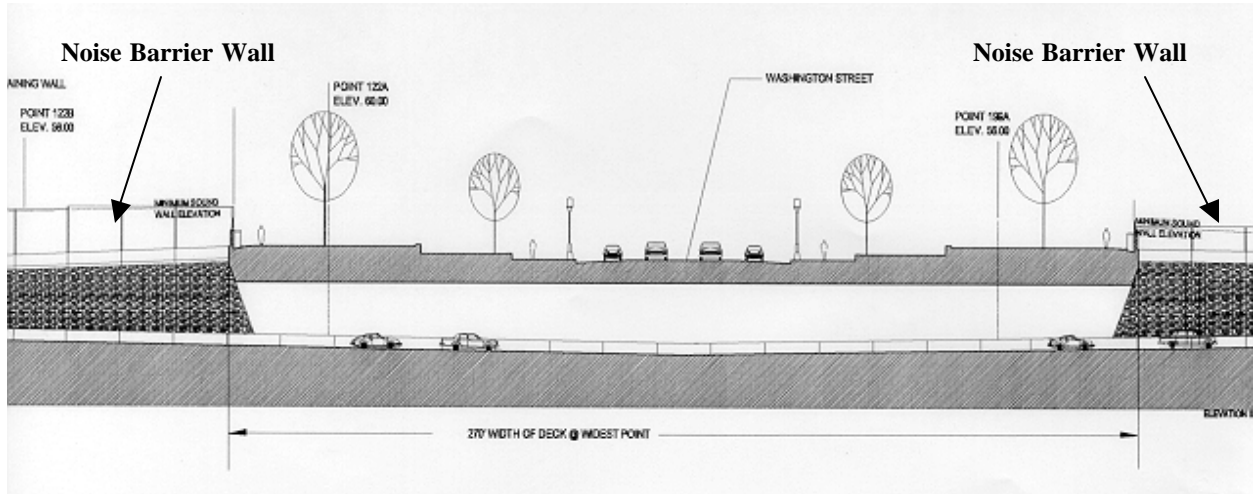
CONFORMANCE

National Historic Preservation Act

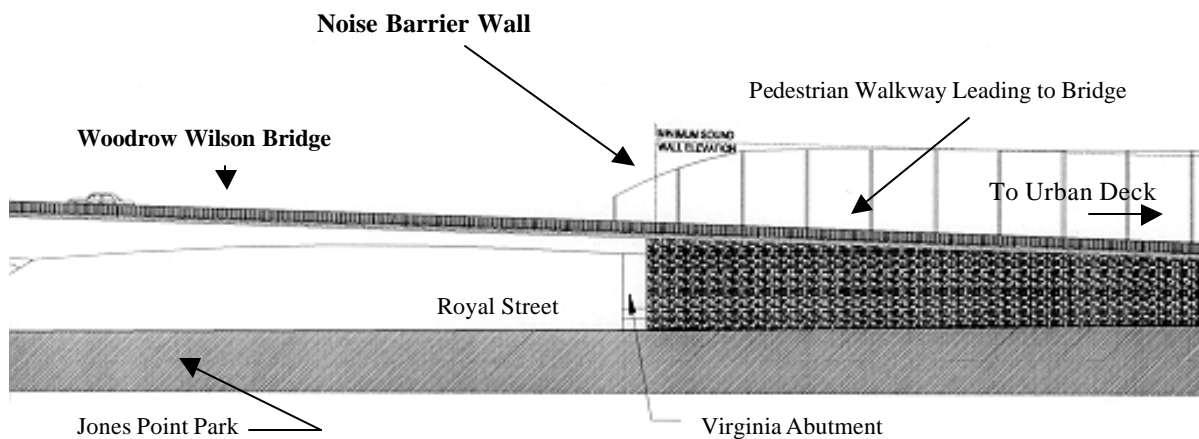
A Memorandum of Agreement (MOA) for the proposed Woodrow Wilson Bridge replacement was signed in October and November of 1997. The signatories were FHWA (the lead agency), the National Park Service (NPS), the Advisory Council on Historic Preservation, and the State Historic Preservation Offices for Virginia, Maryland, and the District of Columbia. The signatories and other parties are continuing to consult on specific aspects of the project as they are developed. The City of Alexandria and the Maryland-National Capital Park and Planning Commission (M-NCPPC) are continuing to be active participants in review of the project (including those aspects pursuant to the MOA), as well.



SOUTH PORTION OF URBAN DECK SHOWING DETAIL OF RAILING, STONE VENEER, AND EXPOSED CONCRETE FINISH



SECTION VIEW LOOKING NORTH--SHOWING PROFILE OF DECK AND LOCATIONS OF NOISE BARRIER WALLS AT RIGHT AND LEFT OF DECK, PARALLEL TO I-95



PORTION OF NOISE BARRIER WALL AT VIRGINIA BRIDGE ABUTMENT AS VIEWED FROM NORTH

FHWA and NPS determined that the bridge project would have an adverse effect on the Alexandria Historic District, Jones Point Lighthouse, the District of Columbia South Cornerstone, and two terrestrial archaeological resources within Jones Point Park. In addition, the bridge project was determined to have an effect on the Mount Vernon Memorial Highway/George Washington Memorial Parkway. The signatories also agreed that the project might have an effect on the Freedmen's (Contraband) Cemetery in Alexandria.

A Design Review Working Group, composed of the signatories and affected local jurisdictions and chaired by the Advisory Council on Historic Preservation, was established by the terms of the MOA. It meets regularly to review plans developed by the project team and has reviewed the items in the current submission.

For the current submission, the design team took into account the historic plan of the Mount Vernon Memorial Highway and NPS's General Management Plan for the facility; the agreement between NPS and the City of Alexandria for the management of Jones Point Park and its resources; and that the urban deck is to be designed to avoid temporary and permanent impacts to the Freedmen's (Contraband) Cemetery.



FINAL DESIGN OF FREEDMEN'S CEMETERY

National Environmental Policy Act

Pursuant to the regulations implementing the National Environmental Policy Act (NEPA), the FHWA prepared a Final Supplemental Environmental Impact Statement (FSEIS) and Record of Decision for the Woodrow Wilson Bridge Project. These documents were prepared in April and June 2000, respectively.

On June 16, 2000, NCPC issued its own FEIS which adopted the FHWA FSEIS relating to NCPC's authority for review and approval of this proposed action. The purpose of the FEIS was to identify potential environmental impacts, as defined by CEQ regulations, resulting from the Woodrow Wilson Bridge Project. The FEIS examined alternatives to the proposed action and the impacts of those alternatives. The FEIS also addressed mitigation of adverse effects resulting from the alternatives. NCPC elected to adopt the existing April 2000 FSEIS pursuant to Section 1506.3 of the CEQ regulations. This adoption was accomplished through staff review and approval of the FHWA document. The adopted FEIS was available to the public for review more than 30 days before Commission action.

The submitted preliminary and final design plans are in conformance with all decisions arrived at and documented in the concluding FHWA June 2000 Record of Decision, which was made available to the public. In regard to the urban deck, on page 3 of the FHWA Record of Decision, the information states, *"Since the 1997 FEIS, the Washington Street Urban Deck has been reconfigured and reduced in size based on the coordination with the National Park Service, the City of Alexandria, and Stakeholder Participation Panels."* At page 7 of the Record of Decision, the document states *"With the construction of the Selected Alternative, visual quality of the GWMP is expected to be enhanced and a gateway provided through construction of the Washington Street Urban Deck over the Capital Beltway on both sides of the George Washington Memorial Parkway/Mount Vernon Memorial Highway. Rather than a view of the Capital Beltway, the Parkway would be bordered by additional green space. The Washington Street Urban Deck would also incorporate a connection between the Mount Vernon Trail and the pedestrian/bicycle facility."* Furthermore, FHWA, at page 75 of the Record of Decision, notes in response to comments on the Final Supplemental EIS, *"The Washington Street Urban Deck is still under review based on several issues one of which is cost, another is functionality and appropriate Section 4(f) mitigation. Life safety system analyses for the deck are underway and therefore various deck sizes are continuing to be evaluated. Studies for deck size changes are subject to review by the public through the City of Alexandria public hearing process, as well as VDOT's public hearings anticipated to be held in early 2001."*

Finally, on the issue of noise abatement, the FHWA Record of Decision expressed the following public information on page 8 of the document, *"...A final decision on constructing the [noise] barriers will not be made until more detailed analyses are conducted on the costs of barriers relative to their benefits, the relative benefits of noise reduction versus other impacts of the barriers such as visual intrusion and safety hazards, and consideration of the opinions and desires of local residents and government representatives. This decision will be made in accordance with established Virginia Department of Transportation noise policy, which includes public input and involvement prior to the completion of design."*

Staff was aware and concurred with the conclusions expressed by the FHWA on the issue of the urban deck size and location as discussed in the June 2000 Record of Decision. Both the final noise barrier locations and final design of urban deck are in accordance with provisions identified in the NEPA process.

Federal Capital Improvements Program

This Woodrow Wilson Bridge replacement project is included in the Federal Capital Improvements Program Fiscal Years 2002 – 2007, adopted by the Commission on July 3, 2001. The total project cost in the currently identified program is \$2 billion.

Comprehensive Plan

At the project's design stage, the proposed ancillary park developments would affect the Potomac shoreline and floodplain, wetlands, ambient noise levels. Policies in the Environment Element of the Comprehensive Plan applicable to these impacts include:

- If construction in a floodplain is necessary, (1) the site should be returned as close as possible to its natural contours; (2) floodplain fill should be minimized; (3) grading requirements should be minimized; and (4) free natural drainage should be preserved.
- Land uses adjacent to Wetlands should be compatible with the preservation of natural resources supported by the Wetlands.
- Highway related development design should be sensitive to existing and proposed adjacent land uses and should employ the use of barrier attenuations, where necessary.

Policies contained in the Parks, Open Space and Natural Features Element apply to shoreline protection and the preservation and enhancement of river views involved with the developments, and state:

- Natural shoreline areas in the National Capital Open Space System should be retained in their natural condition or be appropriately landscaped for a distance of 150 to 200 feet from the water's edge, if possible. Large paved parking areas and other non-water related development should be discouraged within the area.
- The Y-shaped composition of open water spaces created by the confluence of the Potomac and Anacostia Rivers in the L'Enfant City and its environments should be treated as an urban river setting. Development in this area should preserve and enhance the variety of views and vistas proposed in the L'Enfant and McMillan Plans, respect the grand scale of the river landscape, and allow for the appreciation of the extensive areas of water landscape. Docking areas and

waterfront buildings should be integrated with the generally low and continuous line of river embankments.

- The Oxon Hill Children's Farm in Prince George's County and Bellehaven Park on the Virginia side of the Potomac River are located in the vicinity of the proposed bridges and their river views would be affected.

The proposed park developments would require easements for construction on Jones Point Park and the Mount Vernon Memorial Highway. Jones Point Park is federally owned and is designated for Natural Park use in the Comprehensive Plan. The Mount Vernon Memorial Highway is a designated national landmark, a Gateway to the Nation's Capital and is part of the George Washington Memorial Parkway. The following additional policies from the Parks, Open Space and Natural Features Element apply:

- Natural Parks...should be established, protected, and maintained to ensure the conservation and enhancement of the significant features of the National Capital.
- The George Washington Memorial Parkway should be maintained as a scenic corridor which not only serves as a spectacular Gateway artery to the Nation's Capital, but which also preserves its important historic associations. Its scenic, historic, and recreational aspects should be emphasized and protected, even at the expense of its traffic-carrying role.
- The Mount Vernon Trail is a part of the National Trail System extending from the Region and beyond.

Two additional policies in this element relating to bridge design and enhancement of Gateways also apply:

- Bridges over rivers and streams should be designed to retain the natural continuity of waterways, shorelines and valleys. Whenever possible, bridges and their approaches should enhance the sense of arrival, gateway or transitional qualities inherent in river crossings.
- Roadways in the Interstate Highway System are important Gateways used by Visitors and should be maintained in a manner which protects and enhances their landscape character and quality, gives attention to scenic views from the road, and provides informative signs to assist Visitors. Advertising signs and bordering development should be carefully controlled to avoid adverse visual impacts.

The urban deck proposal would also require construction in the Alexandria Historic District. An applicable policy in the Preservation and Historic Features Element specifies:

- New construction on Historic Landmarks or in Historic Districts should be compatible with the historical architectural character and cultural heritage of the

landmark or districts. In design, height, proportion, mass, configuration, building materials, texture, color and location, new construction should complement these valuable features of the landmark or district, particularly features in the immediate vicinity to which the new construction will be visually related.

All aspects of the final site development plans for the urban deck demonstrate consistency with the above policies of the Comprehensive Plan for the National Capital.